

EXPRESS MAIL NO.

**METHOD AND SYSTEM FOR PROCESSING NETWORK DATA PACKETS**

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ABSTRACT OF THE DISCLOSURE

A method for processing IP datagrams using an outbound processing state machine in an outbound processor, wherein the IP datagrams are generated by a host system is provided. The method includes, creating an IOCB with plural host memory addresses that define host data to be sent and a host memory address of a network control block ("NCB") used to build network protocol headers, wherein the host sends the IOCB to the outbound processor. The outbound processor reads the NCB from host memory and creates an IP and MAC level protocol header(s) for a data packet(s) used to send the IP data. If a datagram fits into an IP packet, the outbound processor builds headers to send the datagram and then uses the plural host memory addresses defining the host data to read the data from the host, places the data into the packet and sends the packet.